

<b>INFORMATION DISCLOSURE CITATION</b>  PTO-1449	ATTORNEY'S DOCKET NO.: 98-13DIV2	APPLICATION NO.: To Be Assigned
	APPLICANT: Guan, Shenheng et al.	
	FILING DATE: Even Date Herewith	GROUP: Unknown

JCE79 U.S. PTO  
 10/07/15/16  
 02/08/03

### US PATENT DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUB CLASS	FILING DATE
DKH	3,431,077	3/4/69	Danforth	23	253	7/18/66
	3,536,452	10/27/70	Norton et al.	23	259	
	3,760,831	9/25/73	Colvin	137	117	11/1/71
	4,099,923	7/11/78	Millberger	23	254R	1/17/77
	4,111,758	9/5/78	Wackerbarth	202	138	2/7/77
	4,705,669	11/10/87	Tsuji et al.	422	93	8/27/86
	4,895,706	01/23/90	Root et al.	422	102	4/28/88
	4,996,387	2/26/91	Gerhold et al.	585	654	7/20/89
	5,035,866	7/30/91	Wannlund	422	102	2/16/88
	5,246,665	9/21/93	Tyranski et al.	422	64	6/3/91
	5,304,354	4/19/94	Finley et al.	422	196	11/30/92
	5,324,483	6/28/94	Cody et al.	422	131	2/2/93
	5,340,475	8/23/94	Cortes et al.	210	198.2	10/8/91
	5,467,635	11/21/95	Nakagawa et al.	73	23.350	12/12/94
	5,587,128	12/24/96	Wilding et al.	422	50	11/14/94
	5,710,381	01/20/98	Atwood et al.	73	864.91	3/1/94
	5,753,185	5/19/98	Mathews et al.	422	94	4/23/96
DKH	5,922,286	7/13/99	Girard et al.	422	83	7/31/97

### FOREIGN DOCUMENTS

EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUB CLASS	Translation Yes No	
DKH	DE 27 14 939	11/29/79	Germany	G01N	31/10	X	
	DE 37 42 332 C2	6/9/94	Germany	G 01 N	31/10		X
	DE 41 09 049 A1	9/17/92	Germany	B 07C	5/34		X
	EP 0 803 288 A2	12/29/97	EPO	B01L	3/00		X
	EP 0 870 541 A2	10/14/98	EPO	B01J	19/00		X
	WO 97/32208	9/4/97	PCT	G01N	31/10		X
	WO 98/03521	1/29/98	PCT	C07F	19/00		X
	WO 98/07026	2/19/98	PCT	G01N	31/10	X	
	WO 98/52691	11/26/98	PCT	B01L	3/00		X
DKH	WO 99/59716	11/25/99	PCT	B01J	19/00	X	

Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b>  PTO-1449	ATTORNEY'S DOCKET NO.: 98-13DIV2	APPLICATION NO.: To Be Assigned
	APPLICANT: Guan, Shenheng et al.	
	FILING DATE: Even Date Herewith	GROUP: Unknown
<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages Etc.)</b>		
OK	Ertl, G., et al., Handbook of Heterogeneous Catalysis, VCH Publisher, Vol. 3, p. 1194 and p. 1374 (1997)	
	Falk, C.D.; Mooney, J.J., "Three-Way Conversion Catalysts: Effect of Closed-Loop Feed-Back Control and Other Parameters on Catalyst Efficiency", Society of Automotive Engineers, Inc. 1980, 800462	
	Hammerle, Robert H.; Wu, C.H., "Three-Way Catalyst Performance Characterization", Society of Automotive Engineers, Inc. 1981, 810275	
	Kiezel, L. et al., "Comparative Semi-Micromethod of Studying Catalyst Activity," Chemia Stosowana (Applied Chemistry) XII JA 107 (1968) (Translation)	
	Kulkova, N.V. et al., "An Apparatus for Testing Catalysts of the Oxidation of Ethylene Into Ethylene Oxide," The Chemical Industry, Issue 9, (1968), pp. 16-18 (Translation)	
	Liederman, D. et al., American Chemical Society, Dallas Meeting, April 8-13, 1973, Evaluation of Co/Hydrocarbon Oxidation Catalysts For Automotive Emission Control Systems, 15-32	
	Martin et al., 1993, Analytica Chimica Acta, 281: 557-568	
	"Integrated enzyme reactor/detector for the determination of multiple substrates by image analysis"	
	Martinez et al., 1987, Chemical Abstracts 107:42179y, p. 132	
	"Apparatus for testing the service life of industrial heterogeneous catalysts," Abstract	
	Moates et al., 1996, Ind. Eng. Chem. Res. 35: 4801-4803	
	"Infrared Thermographic Screening of Combinatorial Libraries of Heterogeneous Catalysts"	
	Richardson, J.T., et al., "Characterization and Deactivation of NiO-ThO <sub>2</sub> Catalysts," Applied Catalysis, 48, pp. 152-176, (1989)	
	Unit Instruments, Basics of Thermal Mass Flow Control, 10/17/90	
OK	Wu, Ching-Hsong; Hammerle, Robert H., "Development of a Low Cost, Thermally Stable, Monolithic Three-Way Catalyst System", Ind. Eng. Chem. Prod. Res. Dev. 1983, 22, 559-585	

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PTO/SB/08A				<b>Complete if Known</b>	
<b>SIXTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				Application Number	10/071,546
				Filing Date	February 8, 2002
				Confirmation Number	9873
				First Named Inventor	Guan
				Group Art Unit	1743
				Examiner Name	Dwayne K. Handy
Sheet 1	of	1	Attorney Docket No.	SMX 3161.2 (98-13DIV2)	

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY		
		Number	Kind Code <sup>2</sup> (if known)				
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
DKM	65	WO	98/00231	A1	Caliper Technologies Corp.	01-08-1998	
OTHER ART - NON PATENT LITERATURE DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.					T <sup>6</sup>
DKM	66	STEININGER, M. et al. - "Four-Reactor Apparatus for Chromatographic Studies of Catalysts and Sorbents", Journal of Chromatography, 1982, pp. 279-284, v. 243					

Examiner Signature	Dwayne K. Handy	Date Considered	12/9/2004
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<b>PTO/SB/08A</b> <b>SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/071,546
				Filing Date	February 8, 2002
				Confirmation Number	9873
				First Named Inventor	Shenheng Guan, et al.
				Group Art Unit	1743
Sheet 1 of 2				Examiner Name	To Be Assigned
				Attorney Docket No.	SMX 3161.2 (98-13DIV2)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
DKM	42.	3,770,027		Guigan	11-06-1973
	43.	4,342,407		Citrin	08-03-1982
	44.	4,388,411		Lovelock	06-14-1983
	45.	5,262,130		Kissel et al.	11-16-1993
	46.	5,487,569		Silvis et al.	01-30-1996
	47.	5,595,712		Harbster et al.	01-21-1997
DKM	48.	6,576,197	B1	Windhab et al.	06-10-2003

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
DKM	49.	DD	234 941	A1	Schödel et al.	04-16-1986	✓
	50.	DE	198 09 477	A1	Schüth	09-16-1999	✓
	51.	PCT	WO 97/19749	A1	Dehlinger	06-05-1997	
	52.	PCT	WO 98/16949	A1	Hoechst Research & Technology Deutschland GMBH & Co. KG	04-23-1998	
DKM	53.	PCT	WO 99/64160	A1	Symyx Technologies	12-16-1999	

Examiner Signature	<i>Wayne R. Handy</i>	Date Considered	12/1/04
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<b>PTO/SB/08A</b> <b>SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/071,546
				Filing Date	February 8, 2002
				Confirmation Number	9873
				First Named Inventor	Shenheng Guan, et al.
				Group Art Unit	1743
Examiner Name	To Be Assigned				
Sheet	2	of	2	Attorney Docket No.	SMX 3161.2 (98-13DIV2)

### OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
DRM	54.	CREER, GRAHAM J.; JACKSON, PETER; PANDY, GORDON; PERCIVAL, GORDON G.; and SEDDON, DUNCAN, "The Design and Construction of a Multichannel Microreactor for Catalyst Evaluation," Applied Catalysis 22, 1986, pp. 85-95, Elsevier Science Publishers B.V., Amsterdam, The Netherlands.	
	55.	CUI, HONGWU and CONG, JINSHENG, "Selective Sampling and On-Line Chromatographic Analysis of the Products of Catalytic Decomposition of Methanol", Hebei Gongxueyuan Xuebao [Journal of Hebei Engineering College], No. 3 (1988), pp. 51-60.	✓
	56.	IDELCHIK, I.E. and STEINBERG, M.O., "Resistance in the Cases of Merging of Flow Streams and Division into Flow Streams," Handbook of Hydraulic Resistance, 3rd Edition, pp. 471-500, 1994, CRC Press, Boca Raton, FL.	
	57.	MUNSON, BRUCE R.; YOUNG, DONALD F.; and OKIISHI, THEODORE H., "Fundamentals of Fluid Mechanics, Chapter 8 - Viscous Flow-in Pipes", pp. 455-548.	
	58.	"Research on the IJ LBPMA 1914 - KSLA 1989 - The History of the 'Amsterdam Lab'," Royal/Shell Laboratory, 2/24/1989, pp. 5, Amsterdam.	✓
	59.	SINGOREDJO, LYDIA; SLAGT, MEINDERT; van WEES, JAN; KAPTEIJA, FREEK and MOULIJA, JACOB A., "Selective Catalytic Reduction of NO with NH <sub>3</sub> Over Carbon Supported Copper Catalysts," Catalysis Today, 7, 1990, pp. 157-165, Elsevier Science Publishers B.V., Amsterdam, The Netherlands.	
DRM	60.	VAJO, J.J.; TSAI, W. and WEINBERG, W.H., "Versatile microreactor for studies of gas-surface catalytic reactions between 10 <sup>-7</sup> and 1000 Torr," Rev. Sci. Instrum., Vol. 56, No. 7, July 1985, pp. 1339-1442.	

Examiner Signature	<i>Wayne K Hendy</i>	Date Considered	12/1/04
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PTO/SB/08A		<b>Complete if Known</b>	
<b>THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/071,546
		Filing Date	February 8, 2002
		Confirmation Number	9873
		First Named Inventor	Shenheng Guan, et al.
		Group Art Unit	1743
Examiner Name	Dwayne K. Handy		
Sheet 1		Attorney Docket No.	SMX 3161.2 (98-13DIV2)

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U.S. PATENT DOCUMENTS							
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			

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DKH	61.	"Nanoflowreactor nu in zesvoud uitgevoerd!", Lab Spiegel, September 23, 1988, Royal/Shell Laboratory, Amsterdam	✓

Examiner Signature	Dwayne K. Handy	Date Considered	12/9/04
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PTO/SB/08A

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FOURTH SUPPLEMENTAL  
INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

Use as many sheets as necessary)

Application Number	10/071,546
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Sheet	1	of	1	Attorney Docket No.	SMX 3161.2 (98-13DIV2)
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## U.S. PATENT DOCUMENTS

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		Number	Kind Code <sup>2</sup> (if known)		

## FOREIGN PATENT DOCUMENTS

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		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			

## OTHER ART - NON PATENT LITERATURE DOCUMENTS

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DKH	62	ACKERMAN, et al., Multiple Automated Micro Units, Presented before the Division of Petroleum Chemistry, Inc., American Chemical Society, New York City Meeting, September 11-16, 1966, pp 283-289.	

Examiner  
Signature

Dwayne K. Handy

Date  
Considered

12/9/04

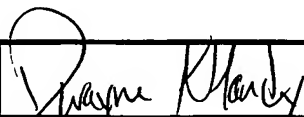
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<b>PTO/SB/08A</b>  <b>FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/071,546	
			Filing Date	February 8, 2002	
			Confirmation Number	9873	
			First Named Inventor	Guan	
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DKN	63	4,018,652		Lanham et al.	04-19-1977		
FOREIGN PATENT DOCUMENTS							
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		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
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DKN	64	European Search Report for European Patent Application No. 02 013 21.0 dated June 11, 2004, 3 pgs.					

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